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ABSTRACT

The influences of students' (N=152) academic, affective, and personal attributes on their success in student teaching (as measured by university supervisors' ratings) were examined in this study. It was found that the following student attributes were related to their student teaching performance: (1) their total university and their education cumulative Grade Point Averages (GPAs) earned prior to student teaching; (2) their anxiety about teaching scores; (3) their Rotter's Locus of Control scores; and (4) their Myers-Briggs' judging-perceptive personal preference. The more successful student teachers were elementary or secondary majors and male or female who were good learners (high earned GPAs) with low anxiety about teaching, who perceived themselves as having a rather high degree of (internal) control over their world, and who were likely to display a (Meyers-Briggs' judging versus perceptive attitude) preference for a planned and orderly rather than a flexible and spontaneous life style. (Author)

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Academic, Affective, and Personal Attributes of Successful Student Teachers

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Abstract

The influences of students' (N=152) academic, affective, and personal attributes on their success in student teaching (as measured by university supervisors' ratings) were examined in this study. It was found that the following student attributes were related to their student teaching performance: a) their total university and their education cumulative GPAs earned prior to student teaching, b) their anxiety about teaching scores, c) their Rotter's Locus of Control scores, and d) their Myers-Briggs' judging-perceptive personal preference. The more successful student teachers were elementary or secondary majors and male or female who were good learners (high earned GPAs) with low anxiety about teaching, who perceived themselves as having a rather high degree of (internal) control over their world, and who were likely to display a (Meyers-Briggs' judging versus perceptive attitude) preference for a planned and orderly rather than a flexible and spontaneous life style.

Academic, Affective, and Personal Attributes of Successful Student Teachers

The research literature on the student teaching experience has variously been described as being ambiguous and contradictory (Hersch, Hull, & Leighton, 1982; Zeichner, 1980), as leading to conformity to the conservative behavior norms of the school bureaucracy (Hoy & Rees, 1977), as the most practical and useful preservice orientation to the real world of teaching (Berliner, 1985), and as insignificant in the overall socialization of teachers as compared to the thousands of hours spent as students in close contact with teachers (Lortie, 1975).

The research findings on the attitude of prospective teachers during teacher training are illustrative of the contradictions found in the student teaching research literature. Callahan (1980), Jacobs (1968), and Lipka and Garlet (1981) reported that the prospective teachers' initial changes in early preservice education from formalized and rigid attitudes toward teaching and pupils to a more liberal, democratic, and humanistic attitude about classroom management are reversed during the student teaching experience. Conversely, Paschal and Treloar (1979) and Sandgren and Schmidt (1956) reported that the prospective teachers' overall positive attitude toward teaching and pupils becomes even more positive during student teaching.

After conducting an extensive review of the research on the impact of student teaching upon prospective teachers, Zeichner (1980) attempted to account for the ambiguity and contradictions found in the literature. He suggested that student teaching has a varied impact upon different individuals, that its impact is neither totally positive nor totally coercive, and that the benefits of student teaching are influenced by the characteristics of the school placement. Relatedly, Tabachnick and Zeichner (1984) concluded that the research literature on the impact of student teaching upon prospective teachers suggests that both characteristics of the prospective teachers and the characteristics of the school placement influence the outcomes of the student teaching experience. In support of this view Villeme and Hall (1980) reported that prospective teachers' attitude toward education varies by anticipated teaching grade level, selected educational major, and gender; and Pigge and Marso (1987) also found that these three variables were related to prospective teachers' changes in both attitude and concerns about teaching during teacher training.

The purpose of this investigation was to further examine (primarily through designs resembling the causal-comparative approach) the influence that selected attributes of prospective teachers have on their success in student teaching. More specifically, this study was designed to determine whether

prospective teachers' when classified by varying levels or categories of their academic, affective, and personal characteristics differed significantly on their success in student teaching (as determined by their university supervisors' ratings of their performance). The following three hypotheses were stated to guide the investigation:

1. There will not be significant mean differences in the student teaching success of the prospective teachers when they are classified by varying levels or categories of these academic attributes: a) total university cumulative GPA earned prior to commencing student teaching, b) education cumulative GPA earned prior to commencing student teaching, c) basic academic skills upon entrance to teacher training (composite score on the Comprehensive Test of Basic Skills), d) academic aptitude upon admission to the university (ACT composite score), and e) anticipated teaching grade level (elementary or secondary).

2. There will not be significant mean differences in the student teaching success scores of the prospective teachers when they are classified by varying levels of these affective attributes: a) attitude toward teaching as a career, b) concerns about teaching (self, task, impact, and total), and c) anxiety about teaching.

3. There will not be significant mean differences in the student teaching success of the prospective teachers when they

are classified by varying levels or categories of these personal attributes: a) Rotter's Locus of Control (internal or external), b) by gender, and c) Myers-Briggs' personal preferences (extraversion-introversion [E-I], sensing-intuitive [S-N], thinking-feeling [T-F], and judging-perceptive [J-P]).

Method

The subjects consisted of all students entering the teacher preparation program at Bowling Green State University during the 1985 calendar year and who had completed their student teaching experience by the end of the second semester of the 1987-88 academic year. This sample consisted of 152 prospective teachers of whom 74 anticipated teaching in elementary grades and 58 at the secondary level and of whom 126 were females.

When enrolled in their first teacher-training course each of the prospective teachers completed the Comprehensive Test of Basic Skills (CTBS) and at the end of their student teaching experience they completed the Teacher Concerns Questionnaire (George, 1978), The Attitude Toward Teaching As a Career Scale (Merwin & Divesta, 1959), and The Teaching Anxiety Scale (Parsons, 1973). The concerns questionnaire consists of 15 items with five items on each of the self, task, and impact subscales. The response scale for each item is a continuum from not concerned (1) to extremely concerned (5). The attitude scale contains 11 items each of which is responded to on a scale

from strongly disagree (1) to strongly agree (6) where the higher scores indicate a more positive attitude. The anxiety scale is comprised of 29 items with a response continuum for each item from never (1) to always (5) with higher scores indicating more anxiety toward teaching as a career.

Additionally, the subjects completed the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) and Rotter's Locus of Control (Rotter, 1966) measures just prior to their student teaching experience. Students' ACT scores and their education and total university GPAs earned prior to student teaching were obtained from each student's admission and transcript records. Further, each student's university supervisor provided a numerical evaluation of the prospective teacher's student teaching performance. The university supervisor's rating scale of student teacher performance consists of six items requiring the supervisors to rate each student teacher relative to all student teachers he/she supervised over the previous five years in six performance categories (see Appendix): content presentation, preparation-organization, learning climate, controlling or managing student behavior, professional knowledge and behavior, and fairness-tact-judgement. Each of these six items was responded to on an eight-step scale from lowest '0' to truly exceptional '7' yielding a total score range from zero to 42.

A series of one-way ANOVAs were used to analyze the data gathered from the prospective teachers with levels or categories of the academic, affective, and personal attributes used as the column classifications (independent variable) and with the prospective teachers' student teaching performance scores used as the dependent variable. The column classifications (independent variables) were formed by selecting the top, middle, and bottom one-thirds of the prospective teachers on the basis of their total university GPA, education GPA, ACT scores, CTBS scores, the four concerns scores (self, impact, task, and total), the anxiety scores, and their attitude toward teaching scores. The dependent variable for each analysis was the supervisors' ratings of student teaching performance.

In addition, a series of t-tests of the differences between independent means were made using the classifications from the two personality measures and the classifications of gender and anticipated teaching grade level (elementary or secondary) to separate the prospective teachers into two groups with the university supervisor's ratings of student teaching performance again being used as the dependent variable. The personality classifications consisted of the external (raw score of 12 or higher) and internal (raw score of 11 or less) orientations from Rotter's Locus of Control and the personal preference classifications from the Myers-Briggs Type Indicator:

extraversion or introversion, sensing or intuitive, thinking or feeling, and judging or perceptive.

Findings

The data analysis procedures resulted in the identification of significant mean differences ($p \leq .05$) in the prospective teachers' success in student teaching (as measured by university supervisors' ratings) when the prospective teachers were classified by various levels of their academic, affective, and personal attributes. The identification of these significant differences led to the rejection of each of the three stated hypotheses although not all of the student attribute classifications within each of the academic, affective, and personal categories or levels were found to have any influence upon or relationship with success in student teaching performance scores.

Among the set of academic attributes (hypothesis one), both the total university and education cumulative GPAs earned prior to student teaching were found to be positively related to students' success in student teaching. Conversely, ACT and CTBS composite score classifications and the anticipated teaching grade level classification (elementary or secondary) of the prospective teachers did not reveal any significant mean differences in or relationships to the students' success in student teaching scores. The classification of the prospective

teachers by top, middle, and low total university GPAs revealed student teaching score means of 32.8, 31.2, and 28.2, respectively ($F = 6.04$, $p = .003$). Scheffe pair-wise mean comparisons of the three means revealed that the prospective teachers earning university GPAs within the middle and top one-thirds had student teaching performance means significantly higher ($p \leq .10$) than those in the bottom one-third. The related student teaching performance means for the prospective teachers classified by cumulative education GPAs were 33.4, 30.3, and 28.7 ($F = 7.75$, $p < .001$). Comparisons between all pairs of these means revealed that those prospective teachers earning education GPAs in the top one-third had a significantly higher student teaching mean than the middle and low one-thirds of the subjects; whereas no difference existed between the middle and low one-third groups. (The coefficients of correlation between the two sets of GPAs and supervisors' ratings of student teaching performance were both .28 [$p < .001$] indicating that those students who earned somewhat though not markedly higher education and university GPAs also tended to receive higher supervisor ratings of their performance in student teaching.) These ANOVA analyses with associated Scheffe pair-wise mean comparison results are reported on Table 1.

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Insert Table 1 about here

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Within the category of selected affective attributes (hypothesis two), it was found that the anxiety about teaching scores were significantly related to the university supervisors' ratings of student teaching performance, but that the student teachers' attitude and concerns about teaching scores were not. When the prospective teachers were classified by top, middle, and low one-thirds based upon their anxiety about teaching, the respective student teaching performance means were 29.5, 30.0, and 32.8 ($F = 3.65$, $p < .05$). The Scheffe pair-wise mean comparisons revealed that those students within the low one-third of the anxiety scores were rated significantly higher in average student teaching performance than were the top one-third anxiety subjects; whereas the mean for the middle one-third subjects did not differ from the means for either of the other two groups of subjects. (The coefficient of correlation between the student teaching scores and the anxiety scores was -.20 [$p = .01$] indicating that those prospective teachers having less anxiety about teaching were perceived by their university supervisors as generally performing somewhat more effectively as student teachers.) This ANOVA analysis with

the associated Scheffe pair-wise comparisons is reported on Table 2.

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Insert Table 2 about here

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The analyses using the personal attribute classifications (hypothesis three) revealed that students' locus of control and the judging or perceptive personal preference were related to university supervisors' ratings of student teaching performance but that the gender of the prospective teachers and the extraversion-introversion, sensing-intuitive, and the thinking-feeling personal preferences were not. The prospective teachers classified as having an internal control orientation (raw score of 11 or less on the Rotter's instrument) earned a student teaching performance mean of 31.5; whereas those having an external control orientation (raw score of 12 or more) earned a student teaching performance mean score of 28.6 ($t = 2.29$, $p < .05$). For the judging or perceptive preference as measured by the Meyers-Briggs' instrument, the prospective teachers classified as judging earned a student teaching performance mean of 31.5; whereas those classified as perceiving earned a mean of 28.8 ($t = 2.28$, $p < .05$). It would appear from these findings that prospective teachers who have a feeling of being controlled by external rather than internal forces and those who have a

perceptive rather than a judging preference in interacting with their world are perceived by their university supervisors as performing less well in student teaching.

Summary and Discussion

Each of the three stated hypotheses was rejected, as two of the five academic attributes, one of the six affective attributes, and two of the six personal preference attributes selected for study were found to result in significant mean differences in the rated performance of the students in their student teaching practicums. It was found that prospective teachers' university and education cumulative GPAs earned prior to student teaching, anxiety about teaching as a career, a judging in contrast to a perceptive preference for viewing the world, and feelings of internal control over one's world were each found to be related to performance in student teaching as perceived by university supervisors. These statistically significant relationships identified between prospective teachers' attributes and their performance in student teaching were, however, of relatively low magnitude (coefficients of .28 or lower).

Both total university and education cumulative GPAs earned prior to student teaching were found to be positively related to the prospective teachers' performance in student teaching; whereas neither the students' ACT and CTBS scores nor their

anticipated grade level of teaching (elementary or secondary) were found to be related to their performance in student teaching. This might suggest that success in student teaching encompasses broader aptitude and achievement abilities than is measured by either the ACT or CTBS instruments. There is of course variance in common between these students' GPAs and their ACT and CTBS scores as revealed by moderately high coefficients of correlation between these variables (coefficients in the low .40's to middle .60's respectively). Additionally, the lack of a significant relationship between the prospective teachers' student teaching performance and anticipated teaching grade level indicates that quality of student teaching performance as perceived by university supervisors is independent of student teaching grade level assignment (as it should be). The two sets of students' GPAs were of course highly related with one another (.77), and both GPAs correlated moderately to moderately high with high school GPA (high school GPA with total university GPA = .69 and with education GPA = .56).

The analyses of personal and affective data collected from this sample of prospective teachers indicate that anxiety about teaching, feelings of being controlled externally, and a personal preference of perceiving rather than judging one's environment are each negatively related to student teaching performance. These analyses also revealed that attitude and

concerns about teaching; Meyers-Briggs personal preference classifications of extraversion or introversion, sensing or intuition, and thinking or feeling; and prospective teachers' gender were not related to any significant extent with student teaching performance. These findings related to students' personal and affective attributes would suggest that student teaching performance is likely to be impeded by students' feelings of high anxiety about teaching, feelings of being controlled externally rather than they themselves having control over much of their world, and a personal preference for sensing or intuiting rather than using a judging process in addressing the outer world. Additionally, this set of findings also indicates that the gender of a prospective teacher is independent of his/her performance in student teaching (as it should be).

The failure to identify significant relationships between the prospective teachers' attitude and concerns about teaching and their performance in student teaching was somewhat surprising. It may well be, however, that by the time of student teaching most prospective teachers have made significant progress toward developing a positive attitude and also in overcoming or addressing many of their concerns about teaching.

In summation, the data collected from this sample of prospective teachers suggests that those students who perform

most successfully in student teaching have already proven themselves to be good learners (high total university and education GPAs), have relatively low anxiety about becoming a teacher, perceive themselves as having (internal locus) control or influence over their world and fate rather than being controlled externally, and express a judging preference (a preference for making decisions promptly, seeking closure, planning and organizing activities; others tend to perceive these people as being organized and decisive) in addressing the outer world as opposed to those who express a perceptive preference (a preference for being attuned to incoming information, curious, interested, not wanting to miss anything; others tend to perceive these people as being flexible and spontaneous). Additionally and desirably, the data from this study suggests that a prospective teacher's success in student teaching, at least as perceived by university supervisors, is independent of his/her gender and whether he/she taught in the elementary or secondary grades.

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Table 1

Student teaching rating means for prospective teachers classified by total university and education GPA levels

Total University GPAs

Classification	N	Rating Mean	SD	F	p	Scheffe*
(1) Top 1/3	49	32.8	5.7	6.04	.003	1 > 3
(2) Middle 1/3	50	31.2	7.0			2 > 3
(3) Low 1/3	49	28.2	6.9			

Education GPAs

Classification	N	Rating Mean	SD	F	p	Scheffe*
(1) Top 1/3	51	33.4	5.8	7.75	.001	1 > 3
(2) Middle 1/3	48	30.3	7.1			1 > 2
(3) Low 1/3	49	28.7	6.6			

*Scheffe comparison with alpha set at .10.

Table 2

Student teaching rating means for prospective teachers classified by level of anxiety about teaching

Anxiety Level	N	Rating Mean	SD	F	p	Scheffe*
(1) Top 1/3	50	29.5	7.3	3.65	.028	3 > 1
(2) Middle 1/3	52	30.0	6.6			
(3) Low 1/3	50	32.8	5.9			

*Scheffe comparison with alpha set at .10.

Appendix

1. Scale for Rating Student Teaching Performance
2. Report Form for Meyers-Briggs Type Indicator

OERS Research Project
BGSU Supervisor Rating of Student Teacher

Name of
Student Teacher_____ Date_____

Social Security #_____

Directions: Please rate this student teacher's performance relative to all other student teachers you have supervised say over the past five years on each of the following six categories by circling the single number best reflecting his/her relative rank. The rating numbers are defined as follows:

7 = TRULY EXCEPTIONAL, within top 5% of students I have supervised.
6 = OUTSTANDING, next 5%, approximately 90% of my present and past student teachers would certainly have ratings below this.
5 = UNUSUALLY GOOD, not at the very top but certainly in top 1/4 of all student teachers I have supervised.
4 = A LITTLE ABOVE MY AVERAGE student teacher, somewhat above the middle in terms of performance; about 40% of my past students have done better than this individual, 60% have done worse.
3 = A LITTLE BELOW MY AVERAGE student teacher, about 60% of my past students have done better than this individual, 40% worse.
2 = BELOW AVERAGE, certainly in the bottom 1/3 of my past student teachers, but I have had worse!
1 = NEAR THE BOTTOM, probably in the bottom 10-20% of students I have supervised. (But could still be of sufficient quality (or promise) to earn a teaching certificate).
0 = THE BOTTOM!--Poorest student I have ever had! I don't see how he/she ever got to the student teaching stage.

The above described ratings are illustrated by the following line schema.

COMPARED TO ALL STUDENT TEACHERS I HAVE SUPERVISED OVER THE LAST FIVE YEARS, THIS INDIVIDUAL RANKS:

0	1	2	3	4	5	6	7
The Bottom!	Near the Bottom	Below Average, In Bottom 1/3	A Little Below My Average Student Teacher	A Little Above My Average Student Teacher	Unusually Good, In Top 1/4	Outstanding, Top 10%	Truly Exceptional, Top 5%

(Please circle your ratings.)

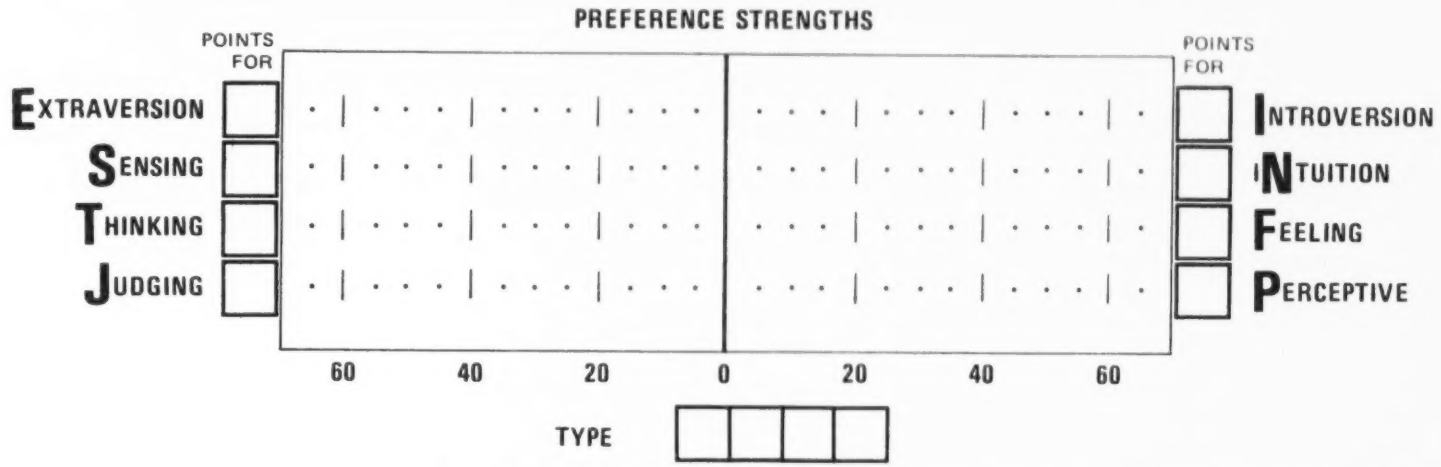
Performance Category	This Student's Performance Rating, Based on Average of My Past Student Teachers, is: The Bottom!							Truly Exceptional
1. Presents Content Effectively: Lessons clear, focused, well organized, effective examples, appropriate pace, assignments clear, communicates well, etc.	0	1	2	3	4	5	6	7
2. Plans, Prepares, and Organizes Activities: Well prepared learning activities, effective use of time, monitors activities, all students participate, students on task, etc.	0	1	2	3	4	5	6	7
3. Maintains Positive Learning Climate: Sensitive to student needs, friendly and accepting, good interaction with students, displays and accepts humor, high but realistic expectations, positive leadership, etc.	0	1	2	3	4	5	6	7
4. Maintains Appropriate Student Behavior: Clear expectation regarding classroom conduct, promotes student self control, uses praise and consequences more than punishment, aware of and addresses undesirable behavior, shows consistency in applying rules, etc.	0	1	2	3	4	5	6	7
5. Displays Professional Knowledge & Behavior: Knows subject matter, cooperative attitude, responds positively to supervision, models professional behavior, growing professionally, etc.	0	1	2	3	4	5	6	7
6. Shows Fairness, Tact, Compassion, and Good Judgement in dealing with pupils, parents, supervisors, other teachers, etc.	0	1	2	3	4	5	6	7

Pertinent Evaluative Comments:

Please send completed form to Fred Pigge, 310 Ed Bldg, BGSU, within 10 days (if possible) of receipt. Thank you.

Report Form for Myers-Briggs Type Indicator*

Name _____ Sex: M☐ F☐ Age _____ Other _____ Date _____



Indicator questions deal with the way you like to use your perception and judgment, that is, the way you like to look at things and the way you like to go about deciding things. The answers given reflect four separate preferences called EI, SN, TF and JP. The profile above shows your score on each preference. The four letters of your "type" tell how you came out on all four preferences. What each preference means is shown below.

E An E for extraversion probably means you relate more easily to the outer world of people and things than to the inner world of ideas.

S An S for sensing probably means you would rather work with known facts than look for possibilities and relationships.

T A T for thinking probably means you base your judgments more on impersonal analysis and logic than on personal values.

J A J for the judging attitude probably means you like a planned, decided, orderly way of life better than a flexible, spontaneous way.

I An I for introversion probably means you relate more easily to the inner world of ideas than to the outer world of people and things.

N An N for intuition probably means you would rather look for possibilities and relationships than work with known facts.

F An F for feeling probably means you base your judgments more on personal values than on impersonal analysis and logic.

P A P for the perceptive attitude probably means you like a flexible, spontaneous way of life better than a planned, decided, orderly way.

Each combination of preferences tends to be characterized by its own set of interests, values and skills. On the back of this page are very brief descriptions of each type. Find the one matching your four letters and see whether or not it fits you. If it doesn't, try to find one that does. Whatever your preferences, of course, you may still use some behaviors characteristic of contrasting preferences, but not with equal liking or skill. This tendency may be greater if preference strength on a scale is low (under 15). For a more complete discussion of the types and their vocational and personal implications, see *Introduction to Type* by Isabel Briggs Myers, or consult your counselor.

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